

IN THE SPECIFICATION

Please replace paragraph [0029] as follows:

--[0029] Meanwhile, the solid state image pickup device being described here is conspicuously characterized by having impurity region portions **15** formed in the semiconductor region **13**. Like the overflow barrier region **12**, the impurity region portions **15** are comprised of an impurity of the second conduction type, i.e., for example, a p-type impurity region, and, preferably, the impurity concentration in the impurity region portions **15** is higher than that in the overflow barrier region **12**. As shown in **FIG. 2A**, the impurity region portion **15** is located at a position corresponding to a position between the photo-sensors **1** adjacent to each other in the vertical direction of the two-dimensional arrangement, and, as shown in **FIG. 2B**, it is continuously formed in the horizontal direction of the two-dimensional arrangement over roughly the entire region of the image pickup region, shown in Fig. 1 [[4]]. Here, the position corresponding to a position between the photo-sensors **1** includes the meaning of a position which is between the photo-sensors **1**, namely, a position which is at roughly the same depth as the photo-sensors **1** and located between the photo-sensors **1**, and a position which is deeper than the photo-sensors **1** so as not to be located between the photo-sensor **1** but which appears between the photo-sensors **1** when viewed on a plan view basis from the face layer portion side of the semiconductor substrate. Besides, the expression "roughly the entire region of the image pickup region [[4]]" means the range from one end (inclusive of the vicinity thereof) to the other end (inclusive of the vicinity thereof) of the image pickup region, shown in Fig. 1 [[4]].--

Please replace paragraph [0032] as follows:

--[0032] In the solid state image pickup device configured as above, the impurity region portions **15** are each formed at a position corresponding to a position between the photosensors **1** adjacent to each other in the vertical direction, and the impurity region portions **15** is each continuously formed in the horizontal direction over roughly the entire region of the image pickup region, shown in Fig. 1[[4]]. Namely, the impurity region portion **15** as a barrier region is formed not at a part of the portion between pixels as in the related art but over the entire region of that portion. Therefore, a sufficient potential barrier can be formed between the photo-sensors **1** adjacent to each other in the vertical direction, and the mixing of signal charges in the vertical direction can be prevented. Therefore, according to the solid state image pickup device in this embodiment, the mixing of signal charges between the adjacent pixels can be prevented, even in the case where the overflow barrier region **12** is formed at a deep position for the purpose of enhancing the sensitivity per unit area.--